Purified anti-human CD178 (Fas-L) Antibody

Catalog# / Size	306402 / 100 µg
Clone	NOK-1
Regulatory Status	RUO
Workshop	VII 70322
Other Names	Fas Ligand (FasL), CD95L, TNFSF6, Fas-L
Isotype	Mouse IgG1, κ
Description	CD178 is a 38-42 kD type II glycoprotein also known as Fas ligand and CD95L. CD178 belongs to the TNF superfamily and is expressed on activated T lymphocytes, NK cells, monocytes, and granulocytes. CD178 is also expressed on parenchymal cells of the retina and cornea, retinal pigment epithelial cells, and testis. The extracellular region of FasL can be cleaved by matrix metalloproteinases (MMPs) to give rise to a 26 kD soluble protein. CD178 binds to CD95, a member of the TNFR superfamily, to induce apoptosis. CD95/CD95L interactions play an important role in the maintenance of peripheral tolerance and survival.

Product Details

Verified Reactivity	Human
Reported Reactivity	Baboon
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	L5178Y mouse T lymphoma cells expressing recombinant human FasL
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - *Quality tested* ICC, IP, WB - *Reported in the literature, not verified in house*
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 µg per 10^6 cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation[1,2], immunofluorescence microscopy[3], immunocytochemistry[2], blocking of Fas induced apoptosis[1], and Western blotting[11]. Fas Ligand is expressed at low density on activated cells. For most successful immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 306407) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated antibody (Cat. No. 306404) or biotinylated anti-mouse IgG second step (Cat. No. 405303), followed by SAv-PE (Cat. No. 405204)). In addition, applying matrix metalloproteinases (MMPS) inhibitor in the cell culture system will increase the FasL staining intensity. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 306415 and 306416).

Application References

(PubMed link indicates BioLegend citation)

1. Kayagaki N, *et al.* 1995. *J. Exp. Med.* 182:1777.
2. Herr I, *et al.* 2000. *Cell Death Differ.* 7:129. (WB)
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5. Strauss L, *et al.* 2009. *J. Immunol.* 182:1469. PubMed

6. Li JH, *et al.* 2009. *Am J. Pathol.* 175:1124. PubMed
7. Zhao Q, *et al.* 2011. *Fitoterapia.* 82:735. PubMed
8. Kruger K, *et al.* 2011. *J. Appl. Physiol.* 110:1226. PubMed
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13. Mooren FC, *et al.* 2012. *J. Appl. Physiol.*113:1082. PubMed
14. Robinet P, *et al.* 2014. *J Immunol.* 192:5332. PubMed
15. Wang Y, *et al.* 2014. *J Endocrinol.* 222:151. PubMed

Product Citations

1. Ma Y *et al.* 2017. Cell host & microbe. 21(5):580-591 . PubMed
2. Svajger U, *et al.* 2019. Front Immunol. 2.240972222. PubMed
3. Li J, *et al.* 2009. Am J Pathol. 175:1124. PubMed
4. Strauss L, *et al.* 2009. J Immunol. 182:1469. PubMed
5. Krüger K, *et al.* 2011. J Appl Physiol. 110:1226. PubMed
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7. Khalid M, *et al.* 2012. J Virol. 86:4906. PubMed
8. Shrestha B, *et al.* 2012. J Virol. 86:8937. PubMed
9. Mooren F, *et al.* 2012. J Appl Physiol. 113:1082. PubMed

RRID AB_314600 (BioLegend Cat. No. 306402)

Antigen Details

Structure	TNF superfamily, type II glycoprotein, 38-42 kD, 26 kD soluble form
Distribution	Activated T cells, NK cells, testis, eye, neutrophils, Clara type II cells
Function	Apoptosis, immune privilege
Ligand/Receptor	CD95
Cell Type	Neutrophils, NK cells, T cells
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Immunology, Neuroscience
Molecular Family	CD Molecules
Antigen References	1. Suda T, *et al.* 1997. *J. Exp. Med.* 12:204. 2. Kayagaki N, *et al.* 1995. *J. Exp. Med.* 182:1777. 3. Tanaka M, *et al.* 1995. *EMBO J.* 14:1129.
Gene ID	356

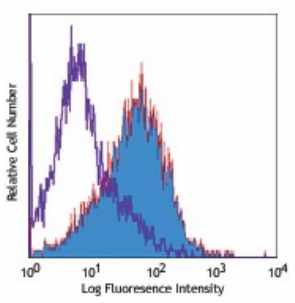
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

Biotin anti-human CD178 (Fas-L), PE anti-human CD178 (Fas-L), Purified anti-human CD178 (Fas-L), Brilliant Violet 421™ anti-human CD178 (Fas-L), TotalSeq™-A0177 anti-human CD178 (Fas-L), Ultra-LEAF™ Purified anti-human CD178 (Fas-L), PE/Cyanine7 anti-human CD178 (Fas-L), TotalSeq™-C0177 anti-human CD178 (Fas-L) Antibody, APC anti-human CD178 (Fas-L)

Product Data



Human Fas Ligand transfected cells stained with purified NOK-1, followed by biotinylated anti-mouse IgG and Sav-PE

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